

SOV/78-3-12-28/36

Investigations Concerning the Solubilities of the Systems  $\text{Li}_2\text{SO}_4$ - $\text{K}_2\text{SO}_4$ - $\text{K}_2\text{SO}_4$ - $\text{H}_2\text{O}$  at 25°C

crystallizes in bipyramides with the following refractive indices:  $N_g = 1.474$  and  $N_p = 1.471$ . In the quaternary system of  $\text{Li}_2\text{SO}_4$ - $\text{Na}_2\text{SO}_4$ - $\text{K}_2\text{SO}_4$ - $\text{H}_2\text{O}$  at 25°C there exist crystallization areas of the following salts:  $\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$ ,  $\text{Li}_2\text{SO}_4 \cdot 3\text{Na}_2\text{SO}_4 \cdot 12\text{H}_2\text{O}$ ,  $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$ ,  $\text{K}_2\text{SO}_4$ ,  $3\text{K}_2\text{SO}_4 \cdot \text{Na}_2\text{SO}_4$ ,  $\text{Li}_2\text{SO}_4 \cdot \text{K}_2\text{SO}_4$ , and the compound  $2 \text{Li}_2\text{SO}_4 \cdot \text{Na}_2\text{SO}_4 \cdot \text{K}_2\text{SO}_4$ . There are 2 figures, 1 table, and 9 references, 5 of which are Soviet.

SUBMITTED: June 5, 1958

Card 2/2

LEPESHKOV, I.N.; BODALEVA, N.V.; KOTOVA, L.T.

Solubility in the system  $\text{Li}_2\text{SO}_4\text{-Na}_2\text{SO}_4\text{-K}_2\text{SO}_4\text{-H}_2\text{O}$  at 50 and 100°.  
Zhur.neorg.khim. 6 no.7:1693-1701 Ji '61. (MIRA 14:7)  
(Alkali metal sulfates) (Solubility)

LEPSHKOV, I.N.; BODALEVA, N.V.; KOTOVA, L.T.

Solubility polytherm for the quaternary system  $\text{Li}_2\text{SO}_4 - \text{Na}_2\text{SO}_4 - \text{K}_2\text{SO}_4 - \text{H}_2\text{O}$   
in the temperature range from 15 to 100°C. Zhur.neorg.khim. 7 no.7:  
1699-1703 JI '62. (MIRA 16,3)  
(Alkali metal sulfates) (Solubility)

IVANOV, K.Ye.; KOTOVA, L.V.

Problems of the dynamics of the development and hydromorphological characteristics of raised bogs in the Baraba Steppe. Trudy GGI no.112:33-53 '64.  
(MIRA 17:7)

KONSTANTINOV, B.P., akademik; KOTOVA, L.V.

Role of lengthwise mixing in exchange columns in isotope separation. Dokl. AN SSSR 135 no.4:896-898 '60. (MIRA 13:11)

1. Fiziko-tekhnicheskiy institut Akademii nauk SSSR.  
(Isotope separation)

MIKHNOVSKIY, V.K.; VYSOTSKAYA, P.N.; KOTOVA, L.V.

Effect of organic fertilizers on the formation of humus and  
nitrogen balance in loamy turf-podzolic soils. Pochvovedenie  
no.12:61-67 D '62. (MIRA 16:2)

1. Pochvennyy institut imeni V.V.Dokuchayeva.  
(Podzol) (Humus) (Soils--Nitrogen content)

KOTOVA, M.; LAPIDUS, M., starshiy inspektor kontory.

Reduce the number of organizations for geological exploration.  
Fin.SSSR 18 no.2:59-61 F '57. (MLRA 10:5)

1.Nachal'nik otdela Leningradskoy kontory Prombanka (for Kotova)  
(Prospecting)

VITOVETSKIY, P.; KOTOVA, M.

Let's improve the training of printers. Prof.-tekh. obr. 18 no.2:26  
F '61. (MIRA 14:3)

1. Inspektor Moskovskogo gorodskogo upravleniya professional'no-  
tekhnicheskogo obrazovaniya (for Vitovetskiy).
2. Direktor khudozhestvennogo remeslennogo uchilishcha No.3, Moskva  
(for Kotova).

(Printing as a trade)



KOTOVA, M.

SURNAME (in caps); Given Names

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation: Research Institute of Rheumatic Diseases (Vyzkumny ustav  
chorob revmatickych), Prague; Director (Reditel): Prof  
MUDr Frant Lenoch

Source: Prague, Fysiatricky Vestnik, Vol XXXIX, No 3, June 1961,  
pp 165-169

Data: "New Polarographic Method of Estimation of Gold in  
Biological Material."

Authors:

KASSOWITZ, J

KOTOVA, M

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ZEBROVSKIY, V.V.; RUBINSHTEYN, F.I.; Prinimali uchastiye: GORNAYA, R.A.;  
KOTOVA, M.A.; GRINFEL'D, Ye.M.; NOVOZHILOVA, V.I.; KURSKAYA, A.G.

Developing the system of corrosion-preventing coatings for the  
protection of metals under tropical climate conditions. Lakokras.  
mat.i ikh prim. no.3:25-31 '60. (MIRA 14:4)  
(Metals--Corrosion) (Protective coatings)

ZHEBROVSKIY, V.V.; LIVSHITS, Kh.M.; KOTOVA, M.A.; NOVOZHILOVA, V.I.

Paint materials based on modified epoxide resins. Report No.2:

Coatings based on epoxy resins modified by diisocyanates.

Lakokras.mat.i ikh prim. no.1:3-8 '62. (MIRA 15:4)

(Protective coatings) (Epoxy resins)

SHCHUKAREV, S.A.; SMIRNOVA, Ye.K.; VASIL'KOVA, I.V.; KOTOVA, M.S.

Enthalpy of formation of sodium and potassium chlorotantalates. Vest. LGU 18 no.22:174-176 '63. (MIRA 17:1)

DIKENSHTeyN, G.Kh.; KUTUZOVA, V.V.; MASHIKOV, K.K.; BABAYEV, A.G.;  
POL'STER, L.A.; YUFEREV, R.F.; SHISHOVA, A.I.; BAREYEV,  
R.A.; MAKAROVA, L.N.; MURADOV, K.; FYANOVSKAYA, I.A.;  
SEMOV, V.N.; SIROTINA, Ye.A.; TURKINA, I.S.; FEL'DMAN,  
S.L.; KHON, A.V.; KUNITSKAYA, T.N.; GOLENKOVA, N.P.;  
ROSHINA, V.M.; FARTUKOV, M.M.; SHCHUTSKAYA, Ye.K.;  
ALTAYEVA, N.V.; BYKADOROV, V.A.; KOTOVA, M.S.; SMIRNOV,  
L.M.; IBRAGIMOV, M.S.; KRAVCHENKO, M.F.; MARKOVA, L.P.;  
ROZYYEVA, T.R.; UZAKOV, O.; SLAVIN, P.S.; NIKITINA, Ye.A.;  
MILOGRADOVA, M.V.; BARTASHEVICH, O.V.; STAROBINETS, I.S.;  
KARIMOV, A.K.

[Splicing of the wires of overhead power transmission lines]  
Soedinenie provodov vozdukhnykh linii elektroperedachi. Mo-  
skva, Energiia, 1964. 69 p. (Biblioteka elektromontera,  
no.132) (MIRA 17:9)

LAVROV, V.V.; KOTOVA, M.S.

Studies of the Paleogene and Neogene sediments of the  
Mangyshlak Peninsula. Trudy VNIGRI no.218:394-414 '63.  
(MIRA 17:3)

USSR/Cultivated Plants - Fodders.

M-4

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91733

Author : Kotova, N.

Inst : \_\_\_\_\_

Title : Kohlrabi - A Valuable Fodder Crop.

Orig Pub : S. kh. Tatarii, 1958, No 3, 25-27.

Abstract : No abstract.

Card 1/1

~~KOTOVA, N.~~

Anna Ivanovna Gorshunova, electric welder. Sudostroenie 27  
no.10:20-21 0 '61. (MIRA 14, 12)  
(Gorkiy--Hulls(Naval architecture)--Welding)

YEGOROVA, N.B.; KOTOVA, N.A.

Some material on the epidemiological significance of patients  
with chronic dysentery. Zhur.mikrobiol.epid. i immun. 30  
no.5:144-145 Ky '59. (MIRA 12:9)

1. Iz Samarlandskogo meditsinskogo instituta i 1-go gorodskogo  
ob"yedineniya.

(DYSENTERY)



TSVETKOVA, Ye.A.; KOTOVA, N.G.; TUNIK, B.A.; VENGRIKOVICH, L.S.;  
MOCHALOVA, R.M.

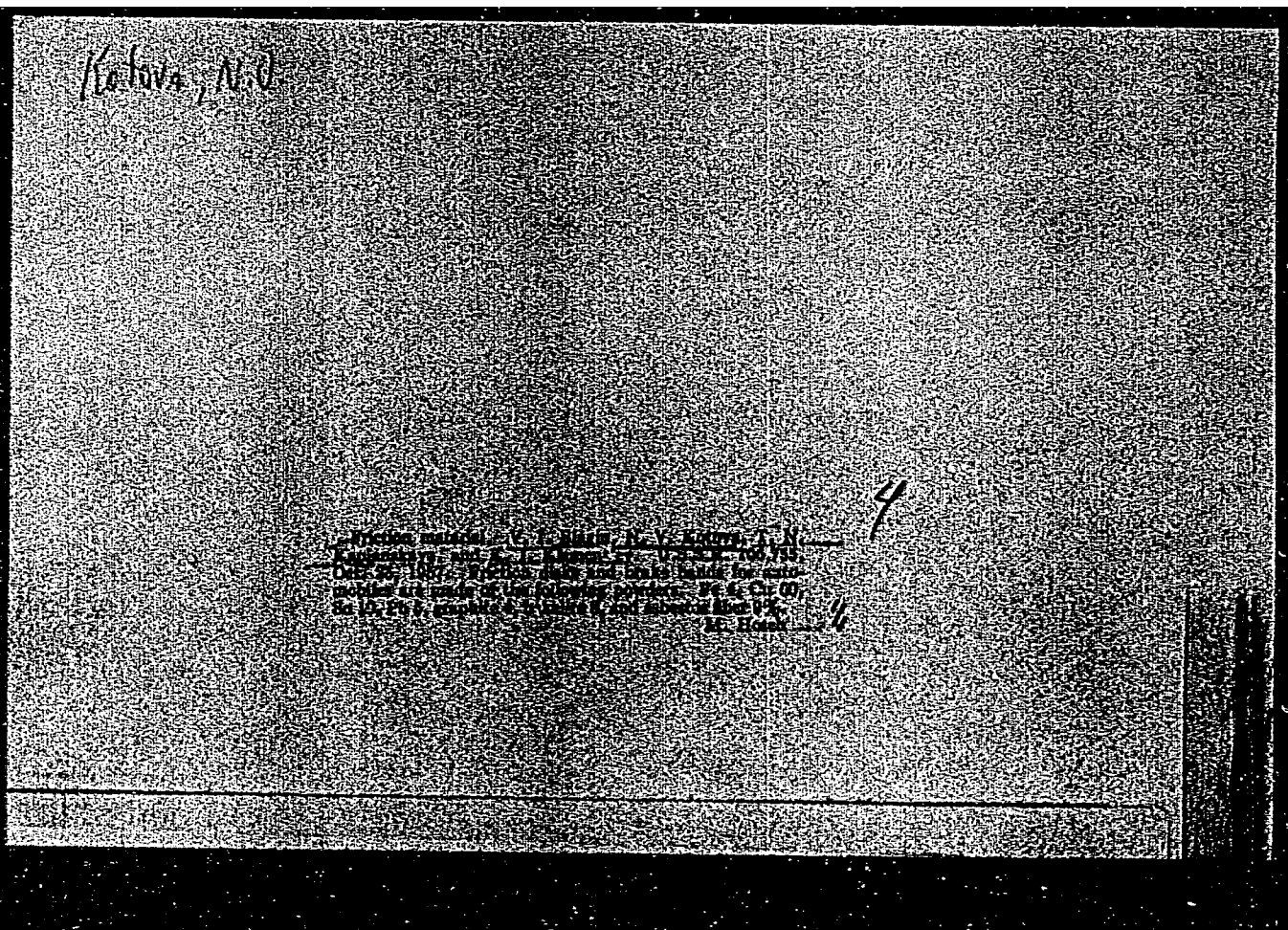
[Catalogue of publications received between July 1 and December 31 1961] Katalog publikatsii, postupivshikh s 1 iulia po 31 dekabria 1961 g. Moskva, No.6. [Longitudes and latitudes. Seismology. Gravimetry. General section] Dolgoty i shirot. Seismologiya. Gravimetriia. 14 p. Obshchii razdel. 7 p. [Rockets and satellites] Rakety i sputniki. 56 p. II. [Meteorology. XIV. Nuclear radiation] Meteorologiya. XIV. Iadernaya radiatsiia. 22 p. III. [Geomagnetism. IV. Aurora. V. Ionosphere. VI. Solar activity. VII. Cosmic rays] Geomagnetizm. IV. Poliarnye silaniia. V. Ionosfera. VI. Solnechnaia aktivnost'. VII. Kosmicheskie luchy. 62 p. IX. [Glaciology. X. Oceanography] Glatsiologiya. X. Okeanografiia. 22 p. (NIRA 16:6)

1. Mirovoy tsentr daniy MG B. 2. Nauchno-issledovatel'skiy institut aeroklimatologii (for all).  
(Bibliography--Geophysics)

TSVETKOVA, Ye.A.; KOTOVA, N.G.; TUNIK, B.A.; VENGRINOVICH, L.S.;  
NIKOLAYEVA, A.A.

[Catalogue of publications received by the World Data Center B  
between January and June 1962] Katalog publikatsii, postupiv-  
shikh v MTsD B s ianvaria po iun' 1962 g. Moskva, No.7. [General  
section] Obshchii razdel 5 p. II [Meteorology. XIV. Nuclear  
radiation] Meteorologiya. XIV. Iadernaia radiatsiya. 18 p.  
(MIRA 16:6)

1. Mirovoy tsentr dannykh MGG-B.  
(Bibliography--Geophysics)



KOTOVA, N. V.

Device for checking calipers. Izv. tekhn. no. 10:12-13 0 '62.  
(MIRA 15:10)

(Calipers—Testing)

KOTOVA, N.V.

Equipment for washing measures and measuring instruments. Izv.  
tekh. no. 6:13 Je '63. (MIRA 16:8)

(Measuring instruments--Cleaning)

KOTOVA, O.G.

Effect of antioxidants on the duration of the induction period  
of milk fat. *Izv.vys.ucheb.zav.;pishch.tekh.* no.5:53-56 '58.  
(MIRA 11:12)

1. Vologodskiy molochnyy institut.  
(Butterfat) (Antioxidants)

KOTOVA, O.M., Cand Vet Sci -- (diss) <sup>Veterinary</sup> "Veterinary and sanitary  
evaluation of meat in ~~the case~~ of animals with leptospirosis!"  
Voronezh, 1958, 15 pp (Min of Agr. Novocherkassk Zootechnical  
~~and~~ <sup>Cavalry</sup> Veterinary Inst in First Cavalry Army) 150 copies  
(KL, 33-59, 120)

- 52 -

1. VALASIK, G.A. KOTOVA, P.V. CHERNYI, F.O.
2. USSR (600)
3. Horse Breeding
4. More about breeding horses for milk production.  
Konevodstvo No. 11 - 1952.  
22-
9. Monthly List of Russian Acquisitions, Library of Congress, February, 1953. Unclassified.



KOTOVA, Serafina

We await you, friends! Rabotnitsa 35 no.7:1 J1 '57. (MLRA 10:8)

1. Pomoshchnik mastera moskovskoy kanvol'no-pryadil'noy fabriki  
imeni Kalinina.

(Youth--Congresses)

30(11)

AUTHOR:

Kotova, S., Assistant to the Master  
of Spinning at the Factory imeni Kalinin,  
Deputy of the Supreme Soviet RSFSR

SOV/29-59-2-8/41

TITLE:

People Will Dress ~~Still Better and More Beautifully~~ (Igadi budut  
odevat'sya yeshche luchshe i krasiveye)

PERIODICAL:

Tekhnika molodezhi, 1959, Nr 2, p 10 (USSR)

ABSTRACT:

The question asked by the editors of the periodical  
"Tekhnika - molodezhi" as to how she imagined future was  
answered by S. Kotova in the following way: Already now our  
country produces more woolen materials per head than the  
United States. Under the Seven-Year Scheme, their production  
will be nearly doubled and their quality will be the best.  
We are producing woolen yarn in our factory. We shall supply  
more from year to year. But the work of the spinner becomes  
easier as numerous technological processes are being perfected  
and automatized. The small improvements to machines introduced  
up to date offer a possibility of increasing production and  
making the work easier. In the future, it will become easier  
still. One will, for instance, insert a woolen band into the  
automatic machine, and it will produce a thread of any desired

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People Will Dress ~~Still Better and More Beautifully~~

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strength. Breaks of thread or other troubles will be repaired  
by the machine itself. The working woman will only have to  
adjust the machine and give the necessary order. In the coming  
years, we shall produce so many different tissues that any  
demand will be covered. Then, people will dress still better  
and more beautifully. There is 1 figure.

Card 2/2

KOTOVA, T. A.

"Directed Variation in the Characteristics of Dysenteric Bacteria", Zhur Mikrobiol Epidemiol i Immunobiol, No. 2, pp 28-33, 1951.

KOTOVA, F.G.; LEYTES, F.L.

Pathogenesis of disorders in the physical development of  
children. Trudy mol. nauch. sotr. MCNIKI no.1:101-106 '59

(MIRA 16:11)

1. Iz pediatricheskoy kliniki (zav. prof. M.I.Olevskiy) i  
laboratorii oblastnoy sudebno-meditsinskoy ekspertizy (zav.  
A.I.Dodina) Moskovskogo oblastnogo nauchno-issledovatel'sko-  
go klinicheskogo instituta imeni Vladimirskogo

\*

KOTOVA, T. I.

"Sporogenesis in Coccic Forms of Microbes", Zhur Mikrobiol, Epidemiol i Immunobiol  
No. 1, pp 36-39, 1950.

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SOV/72-59-1-3/16

AUTHORS: Shmeleva, N. A., Kotova, T. S.

TITLE: Protective Coating for Glass-Melting Crucibles (Zashchitnyye pokrytiya na steklovarennnykh gorshkakh)

PERIODICAL: Steklo i keramika, 1959, Nr 1, pp 8-11 (USSR)

ABSTRACT: During its long experience the Leningradskiy zavod khudozhestvennogo stekla (Leningrad Works of Artistic Glass) has found that glass-melting crucibles when used for melting lead glass last less than when used for melting calciferous sodium glass, and can be used for 15 to 18 melting processes. This is due to the formation of vertical cracks in the inner crucible zone. For the test described in this article 200-1 crucibles of druzhkovskiy clay were used which had been produced from a mass of clay and fire clay in the ratio of 1 to 4 by a pneumatic pounding method. The tests showed that the cracking of the crucibles mainly depends on the glass composition and the contact formations. The table shows the typical compositions of manufactured glass and its cracking tendency. Figure 1 shows a micro-photograph of the contact formations on the crucible walls on melting lead glass and figure 2 on melting calciferous sodium glass. Already in earlier papers

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Protective Coating for Glass-Melting Crucibles SOV/72-59-1-3/16

N. A. Shmeleva stressed the importance of contact formation (Refs 1, 2). The zone structure of the contact layer inside the crucibles can be seen in figure 3. The crucible coating was made of molten quartz with an addition of boric acid and borax. Contact formations on coated crucibles are shown in figure 4. There are 4 figures, 1 table, and 3 Soviet references.

ASSOCIATION: Leningradskiy zavod khudozhestvennogo stekla  
(Leningrad Works of Artistic Glass)

Card 2/2

L 43867-63

ACCESSION NR: AP5010855

UR/0286/65/000/007/0021/0021

AUTHORS: Dalin, M. V.; Kotova, F. S.

TITLE: A method for obtaining an immunosorbent. Class 12, No. 169507

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 21

TOPIC TAGS: immunosorbent, cellulose ester, nitrogenation, antigen

ABSTRACT: This Author Certificate presents a method for obtaining an immunosorbent by combining dinitrogenated cellulose ester with an antigen. To simplify the process, aminated cellulose ester is used as the basic material.

ASSOCIATION: none

SUBMITTED: 19jun64

ENCL: 00

SUB CODE: LS, 00

NO REF SOV: 000

OTHER: 000

LL  
Card 1/2



KOTOVA, T.V.

Practical work in plant breeding for the eighth grade students  
of agricultural schools. Politekh.obuch. no.6:54-65 Je '57.

(MIRA 12:4)

1. Srednyaya shkola No.1 pri stantsii Siverskaya Leningradskoy  
oblasti.

(Field work (Educational method)) (Plant breeding)

KOTOVA, T.V.

Summer practical training in plant growing for the 8th grade  
students of a rural school. Uch. zap. Ped. inst. Gerts. 179:  
349-361 '58. (MIRA 16:5)

(Gatchina District—Agriculture—Study and teaching)

KOTOVA, T.V.

Experience in teaching the subject "Soil and its agronomic characteristics" in the eighth grade of rural schools. Politekh.obuch.  
no.10:25-34 0 '58. (MIRA 11:11)

1, Pakovskiy pedagogicheskiy institut.  
(Soils--Study and teaching)



KOTOVA, V.G.; SHARAGINA, Z.I.

Statistical simulation of a pulse system for contactless  
measurement of the speed of rolling. Izv. AN SSSR. Tekh.  
kib. no.5:113-122 S-O '65. (MIRA 18:11)

KOTOVA, V.G.; NECHAYEV, G.K., doktor tekhn. nauk

Optimizer of a noncontact device for measuring speed in  
metal rolling. Avtom. i prib. no.1:51-54 Ja-Mr '65.

(MIRA 18:8)

KOTOVA, V.I.—

Extended session of the Collegium of the Ministry of Public  
Health of the Uzbek S.S.R. Med.zhur.Uzb. no.5:72-73 My '58.

(MIRA 13:6)

(UZBEKISTAN--PUBLIC HEALTH)

KOTOVA, V.I.

Collegium of the Ministry of Health of the Uzbek S.S.R. Med.  
zhur. Uzb. no.7:78 J1 '61. (MIRA 15:1)  
(UZBEKISTAN--PUBLIC HEALTH)



S/762/61/000/000/003/029

AUTHORS: Glazunov, S.G., Yelagina, L.A., Kotova, V.I.

TITLE: Alloys of the titanium-silicon and titanium-aluminum-silicon system.

SOURCE: Titan v promyshlennosti; sbornik statey. Ed. by S.G. Glazunov. Moscow, 1961, 41-72.

TEXT: This experimental report adduces the results of an investigation of the mechanical properties at 20-800°C, the phase composition, and the structure of Ti-Si alloys with up to 4.5% Si and Ti-6Al alloys with up to 2.5% Si. The objective of the investigation was a determination of possible means for increasing the strength of Ti-Si and Ti-Al-Si alloys through heat treatment and, ultimately, to find high-strength and high-temperature alloys with acceptable ductility. The basic problem is to reconcile the presence of the hardening intermetallic compounds with adequate ductility. This has already been achieved in Ti-13Sn-2.5Al alloys. Reference is made to D.A. Sutcliffe's findings (Revue de Metallurgie, no. 3, 1954, 524) on the desirable effect of Si-Ti intermetallic compounds on the high-temperature (HT) strength and fusion resistance of Ti. Sutcliffe and M. Hansen et al. (Trans. ASM, v. 44, 1952, 518) have commented on the hardenability of Ti-Si alloys by heat treatment which, according to P.D. Frost (J. of Metals, v. 8, no. 1, 1956,

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Alloys of the titanium-silicon and ...

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35-42) can be attributed to intermetallic segregations. In addition to the alloys Ti-(0.03-4.5)Si and Ti-6Al-(0.02-2.5)Si, tests were made of Ti-6Al-2.5Si-(0.5-1.0)Cu and Ti-6Al-2.5Si-2Sn alloys (composition detailed in two full-page tables). The reason for the great number of binary alloys in the region near 0.5% Si is the need for an accurate determination of the effect of Si on the notch-toughness which, according to Sutcliffe, drops most sharply in that particular concentration interval. The invariable Al concentration in the ternary Ti-Al-Sn alloys was selected as great as possible without incurring the formation of the ductility-reducing  $\alpha_2$  phase. The introduction of the Cu and Sn into the most HT-resistant of the ternary alloys, Ti-6Al-2.5Si, was motivated by a hope to improve its HT characteristics without any impairment in ductility. The preparation of the base materials is described in detail. 4-6 specimens of each composition were tested, and the mean result is reported. Hardness tests were performed with a 5-mm diam ball and a 750-kg load after removal of a 3-4-mm thick, possibly oxidized, surface layer. Phase composition was determined by X-ray spectroscopy; Debyeograms were taken. Results: (1) Binary Ti alloys with more than 0.5% Si and ternary alloys with more than 1% Si can be hardened by quenching and aging. The maximum attainable through heat treatment of Ti-Si alloys (2.5% Si) is 30-31 kg/mm<sup>2</sup> and of Ti-6Al-Si (2.5% Si) 15-18 kg/mm<sup>2</sup>. (2) Quench-hardened alloys of the Ti-6Al-Si system with an elevated (2 to 2.5%) Si content are equal in HT characteristics to the BT10 (VT-10) and BT9

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SOV/92-58-12-12/24

AUTHORS: Proshkin, A.A. and Kotova, V.N., Staff Members of the Bashkir Scientific Research Institute of the Petroleum Industry.

TITLE: How to Increase the Throughput of an Atmospheric-Vacuum Pipe Still Without Extending Its Area (Kak povysit' moshchnost' AVT bez uvelicheniya ploshchadey)

PERIODICAL: Neftyanik, 1958, Nr 12, pp 15 - 17 (USSR)

ABSTRACT: In the post-war years a number of Soviet oil refineries built atmospheric-vacuum pipe stills of a standard type. The flow chart of these stills provided that the 90°-170°C fraction be withdrawn from the top of the atmospheric column, and that the 170°-260°C fractions, as well as the 260°-275°C fractions, be withdrawn from stripping columns as side cuts, while mazout is drawn as residue. Later, the atmospheric-vacuum pipe stills of the standard type were enlarged, operating conditions of some of their apparatus changed, and certain equipment remodeled. The flow chart of such modified units provided that the 85°C E.P. fraction (gasoline) be withdrawn from the top of the atmospheric column, and the 240°C E.P. fraction, as well as the 240°C-350°C fractions, be withdrawn from the stripping columns as side cuts. However, only a few atmospheric vacuum pipe stills were actually remodeled in accordance with this revised standard project.

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How to Increase the Throughput of an Atmospheric (Cont.) SOV/92-58-12-12/24

The majority of refineries remodeled their atmospheric-vacuum pipe stills taking into account local requirements and conditions. In the opinion of the author the revised flow schemes of these refineries could be classified into four groups. Of these four groups the first three have a similar vacuum section. Analyzing the refinery runs of each of these four groups, the author comes to the conclusion that best results, from the standpoint of the processing capacity, fractionation, and the range of light products are obtained when the flow scheme provides that an addition column be used for redistillation. Nevertheless, the author believes that they are numerous shortcomings which should be eliminated. To improve fractionating efficiency, raise diesel fuel yields, reduce product losses and ensure the transmission of gases to absorption gas-fractionation units, and eventually to petrochemical plants it is desirable to redesign atmospheric-vacuum pipe stills in accordance with the pattern of the third group. The flow scheme of atmospheric-vacuum pipe stills of this third group provide that gasoline with 150°-170°C E.P. be drawn from the evaporator, while the 225°C E.P. fraction be drawn from the top of the atmospheric column, and diesel fuel be drawn as side cut. An additional column is used for redistillation of the wide fraction with E.P. 225°C which comes from the atmospheric column and evaporator. This redistillation produces a component of automobile gasoline with the standard E.P. In the opinion of the author, the reconstruction

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How to increase the Throughput of an Atmospheric (Cont.) Sov/92-58-12-12/24

of atmospheric-vacuum pipe stills should be made in accordance with the above flow scheme provided, however, the following action is taken; (1) the present evaporator is replaced by a 32-plate fractionator, 2.4m in diameter, which will operate under 10 atm pressure with circulating 300°-310°C reflux; (2) additional tube banks are installed at the bottom of the convection section of pipe still furnaces as recommended by the State Design and Scientific Research Institute for Petroleum Machinery; (3) a stripping column with 6 plates is installed behind the vacuum gas oil receiver; (4) additional pipes are installed in order to increase the yield of the vacuum gas oil, as has been done at the Baku and Grozny refineries. Processing capacity of the atmospheric-vacuum pipe still can be increased 40-70 percent, and the light product yield 2.5 - 3 percent, if this still is reconstructed so as to provide for two twin atmospheric columns.

ASSOCIATION: BashNII NP (The Bashkir Scientific Research Institute of the Petroleum Industry)

Card 3/3

ACC NR: AP7005538

SOURCE CODE: UR/0075/66/021/011/1354/1357

AUTHOR: Strukova, M. P.; Kotova, V. N.

ORG: Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov  
(Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: Determination of phosphorus and titanium in organoelemental compounds

SOURCE: Zhurnal analiticheskoy khimii, v. 21, no. 11, 1966, 1354-1357

TOPIC TAGS: phosphorus analysis, titanium analysis, organophosphorus compound, photometry, organoelemental compound, organotitanium compound

ABSTRACT: A rapid method has been developed for determining phosphorus and titanium in organophosphorotitanium compounds. The test material is decomposed by sodium peroxide in a calorimetric bomb, then the phosphate is titrated with a lanthanum nitrate solution (titanium is masked by complexone III). Titanium is determined photometrically in the form of a peroxide complex compound. The absolute experimental error is  $\pm 0.2-0.3\%$ . A single determination of phosphorus and titanium takes about 1.5 hr. Orig. art. has: 2 tables. [Authors' abstract]

SUB CODE: 07/SUBM DATE: 30Mar65/ORIG REF: 005/OTH REF: 016/ [KP]  
Card 1/1 UDC: 543.80

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000825420002-8

KULAKOV, V.N.; VARFOLOMEYEV, D.F.; BONDARENKO, M.F.; KOTOVA, V.N.;  
AKHMETOV, I.G.; KOLYCHEV, V.M.; NOSAL', G.I.; KIVA, V.N.;  
PANKRATOVA, M.F.; KRUGLOV, E.A.; SHMELEV, A.S.; SHABALIN, I.I.;  
SHIRMUKHAMETOV, O.A.; ISYANOV, I.Ya.; RATOVSAYA, A.A.;  
VAYSBERG, K.M.

Technology of the production of naphthalene from the refining  
products of eastern oils. Nefteper. i neftekhim. no. 4:30-33  
'64. (MIRA 17:5)

1. Nauchno-issledovatel'skiy institut neftekhimicheskikh  
proizvodstv i ordena Lenina Ufimskiy neftepererabatyvayushchiy  
zaved.

KOTOVA, V.P.

Planning of plant laboratories to meet the requirements of the building of communism. Zav.lab. 29 no.5:633-634 '63. (MIRA 16:5)

1. Rukovoditel' gruppy otdela zavodskikh laboratoriy Khar'kovskogo soveta narodnogo khozyaystva.

(Engineering laboratories)

KOTOVA, V. V. Cand Agr Sci -- (diss ) <sup>The</sup> <sup>house</sup> "Biological ~~bases~~ and the development  
of <sup>means</sup> ~~means~~ for the protection of strawberries from diseases under conditions of  
Leningradskaya Oblast." Len 1958, 16 pp (Min of Agriculture USSR. Len Agr  
Inst), 100 copies (KL, 11-58, 119)

KOTOVA, V.V.

Browning of strawberry leaves caused by the fungus *Dendrophoma*  
*obscurans* (Ell. et Ev.) And. Bot. zhur. 46 no.4:574-576 Ap '61.  
(Strawberries—Diseases and pests) (Fungi, Phytopathogenic) (MIRA 14:3)



Kotova, Ye,

KOTOVA, Ye.; MESHCHERYAKOV, Ya.

Treating young plants with growth stimulators. Zhil.-kom.khoz. 4  
no.4:30 '54. (MYRA 7:7)

1. Assistant kafedry dendrologii Voronezhskogo lesokhozyaystven-  
nogo instituta (for Kotova). 2. Direktor pitomnika Voronezhskogo  
upravleniya lesoparkovogo khozyaystva (for Meshcheryakov)  
(Growth promoting substances)

LEONIDOV, N., inzhener, laureat Stalinskoy premii; KOTOVA, Ye., inzhener.

Without casting molds and bloomings. Tekh.mol.24 no.1/2:34 Ja-F  
'56. (Steel--Metallurgy) (MIRA 9:7)

KOTOVA, Ye. N.

"The Development of a New Method of Determining the Spectral Coefficient of Transparency of the Nocturnal Atmosphere." Cand Phys-Math Sci, Moscow Order of Lenin State U imeni M. V. Lomonosov, 12 January 1955. (VM, 3 Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

KOTOVA, Ye. N.

Investigating polarization properties of a nebular extra  
powerful spectrograph. Soob.GAISH no.107:23-36 '60.

(Spectrograph--Testing)

(MIRA 14:3)

KOTOVA, Ye.N.

Study of the changes in hemin under the effect of gamma  
irradiation on its alkaline solution with the help of  
infrared spectra. Radiobiologiya 5 no.5:638-644 '65.  
(MIRA 18:11)

VISHNEVSKIY, N.A.; ABDULLAYEVA, V.M.; IVANOVA, Ye.A.; KOTOVA, Ye.S.;  
KROTOVA, S.I.; STIKSOVA, V.N.

Critical evaluation of the significance of "initial signs" of  
radiation cataract. Med. rad. 5 no.11:77-81 N '60. (MIRA 13:12)  
(RADIATION SICKNESS) (CATARACT)

VISHNEVSKIY, N. A., prof.; ABDULLAYEVA, V. M.; IVANOVA, Ye. A.; KOTOVA, E. S.;  
STIKSOVA, V. N. (Moskva)

Initial symptoms and classification of cataract. Vest. oft. no.5:  
65-68 '61. (MIRA 14:12)

(CATARACT)

KOTOVA, E.S. (Moskva)

Normal indexes of the caliber of the retinal blood vessels and of the diastolic pressure in the central retinal artery in practically healthy subjects. Vest.oft. no.1:78-83 '62.

(RETINA--BLOOD SUPPLY) (BLOOD PRESSURE)

(MIRA 15:11)



KOTOVA, E.S. (Moskva)

Ophthalmological changes in a patient with acute radiation  
sickness. Vest. oft. 76 no.3:37-39 My-Je '63.  
(MIRA 17:2)

ACCESSION NR: AP4025120

S/0241/64/009/003/0052/0056

AUTHOR: L'vovskaya, E. N.; Kotova, E. S.

TITLE: Effect of gamma-neutron irradiation on the eyes with doses approaching the permissible limit

SOURCE: Meditsinskaya radiologiya, v. 9, no. 3, 1964, 52-56

TOPIC TAGS: gamma-irradiation, neutron irradiation, gamma-neutron irradiation, injury of eye, 15 rem total dose, synchrocyclotron operator, proton synchrotron operator, ophthalmological examination, intraocular pressure, retina vessel caliber, crystalline lens, ocular accommodation, color vision, 30 rem total dose, retinal artery diastolic pressure

ABSTRACT: Two groups totalling 186 workers operating high-power accelerators, including synchrocyclotrons and proton synchrotrons, for 6-8 yrs were tested by ophthalmologists. The first group consisted of 157 workers exposed primarily to gamma-irradiation with total doses within a 15-rem limit. The second group consisted of 25 workers exposed primarily to neutron-irradiation with total doses between 16-50 rem and 4 workers with total doses between 50-112 rem.

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ACCESSION NR: AP4025120

A control group of 189 persons with the same age distribution and comparable working conditions, but without radiation exposure, was also tested. Ocular-accomodation, color-vision, and refraction tests were given. Intraocular pressure was measured by Maklakov's method and retina vessel caliber was measured by a new PEO-58 "visuoscope". Biomicroscopic examinations of the crystalline lens were made. Ophthalmological test results for the gamma- and neutron-irradiated workers and the control group show that exposure to gamma and neutron irradiation for 6-8 yrs does not affect the eyes. The crystalline lens, which is the most vulnerable part of the eye, remains unharmed. The only difference found was in the diastolic pressure of the retinal central artery, which tends to be lower in workers exposed to over 30 rem. These workers are in good health and can continue working under the same conditions. Orig. art. has: 4 tables, 1 figure.

ASSOCIATION: None /

SUBMITTED: 04Jun63

DATE ACQ: 17Apr64

ENCL: 00

SUB CODE: AM

NO REF SOV: 005

OTHER: 004

Card 2/2

L'VOVSKAYA, E.N.; KOTOVA, E.S.

Condition of the eye under the effect of  $\gamma$ -neutron irradiation near  
the maximum permissible dosage. Med. rad. 9 no.3:52-56 Mr '64.  
(MIRA 17:12)

L 11159-66 EWT(m) GD

ACC NR: AT6029630

SOURCE CODE: UR/0000/66/000/000/0158/0175

AUTHOR: Kotova, E. S.

ORG: none

TITLE: Characteristics of functional changes in the eye of rabbits irradiated with various doses (25 to 4000 r)

SOURCE: Voprosy obshchey radiobiologii (Problems of general radiobiology). Moscow, Atomizdat, 1966, 158-175

TOPIC TAGS: retina, retinal function, retinal function change, radiation biologic effect, ionizing radiation biologic effect, dosimetry, radiation sickness, retinal vasculature, radiation injury, ophthalmology, rabbit, radiation protective reaction

ABSTRACT: The development of dependable and objective determination methods has made the functional state of the retinal vasculature an ever more important diagnostic index of the functional state of cerebral circulation, with which it is closely linked. The object of the present study was to determine how radiation-induced changes in retinal circulation are related to the radiation dose, severity of radiation sickness, and individual reactivity, as well as to attempt to distinguish between the early vascular reaction to radiation itself and later changes occurring during the course of radiation sickness. Half-grown chinchilla rabbits weighing 2.5—3.5 kg were used. The experimental group (58 rabbits) was irradiated with a 25-r dose of x-rays and/or 500-

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L 11159-66

ACC NR: AT6029630

"APPROVED FOR RELEASE: 08/23/2000

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800-, 1000-, 2000-, or 4000-r doses of  $\gamma$ -rays. Ophthalmological studies included direct examination of the side-lit eyeball, corneal sensitivity, and pupillary reaction; the state of the refracting media was determined with an electroophthalmoscope and PEO-58 visuscope. The fundus was examined directly, and intraocular pressure was determined by Maklakov's method (using a 10-g weight). Systolic and diastolic pressures in the central retinal artery (CRA) and the diameter of retinal vessels were determined. Total-body irradiation with 25 r of x-rays (15 rabbits; 180 kv, 5.6 mamp, 0.5 mm Cu + 1 mm Al; focal distance, 60 cm; rate, 13.6 r/min for 1 min 60 sec [sic]) produced no immediate reactions. Mild leukopenia was seen on the first to third days, and mild leukocytosis from the 5th to 10th days. Thereafter leukocyte counts returned to normal. Shifts in hemoglobin and erythrocyte count were negligible. The only ophthalmological reaction seen was a slight temporary increase (2—6 mm Hg) in systolic pressure in the CRA (over the maximum, not the mean, control value), from 4 to 26 min after irradiation; this dropped to normal in one to six hr. Total-body  $\gamma$ -irradiation with 500 r (9 rabbits; EGO-2 source; rate, 290 r/min for 1 min 43 sec) killed 44% within 2 hr 25 min to 35.5 days. All the animals which died developed serious clinical symptoms of radiation sickness. The surviving rabbits displayed milder symptoms. Results of ophthalmological examination revealed immediate (7 min to several hours) effects: moderate to severe conjunctival hyperemia, hemorrhage beneath the conjunctiva, and dilation of veins in the fundus. Later effects included cloudiness of the retina around the optic nerve and retinal hemorrhage. Two characteristic types of CRA diameter and blood pressure reactions to 500 r were seen. The surviving rabbits displayed a phased reaction: 1) CRA diastolic pressure rising in

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L 44159-66

ACC NR: AT6029630

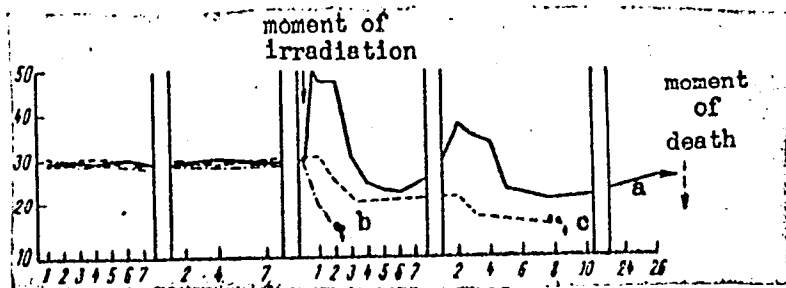


Fig. 2. The same, after irradiation with 800 r.

a - Surviving rabbit; b, c - nonsurviving rabbits.

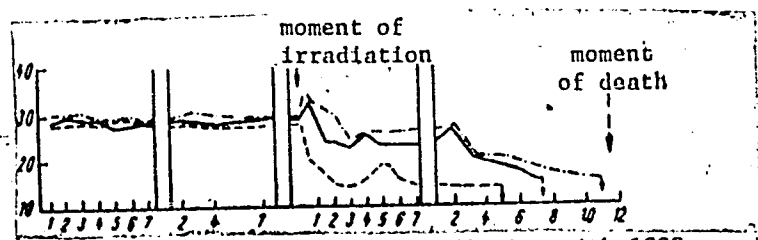


Fig. 3. The same, after irradiation with 1000 r.

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ACC NR: AT6029630

6

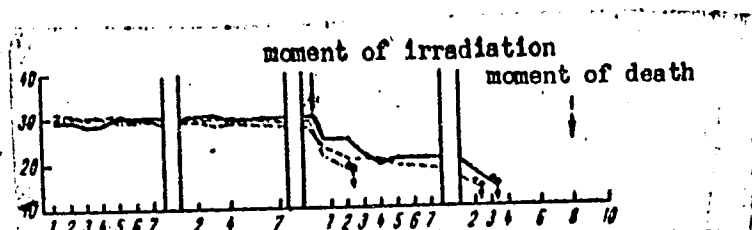


Fig. 4. The same, after irradiation with 2000 r.

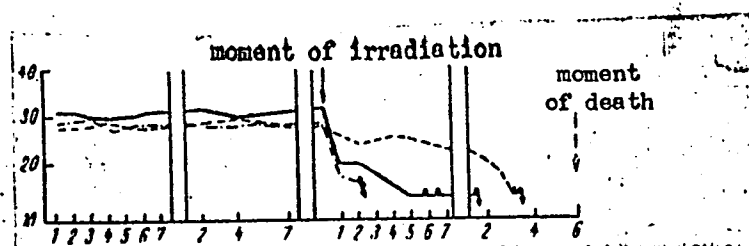


Fig. 5. The same, after irradiation with 4000 r.

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L 44159-66

"APPROVED FOR RELEASE: 08/23/2000

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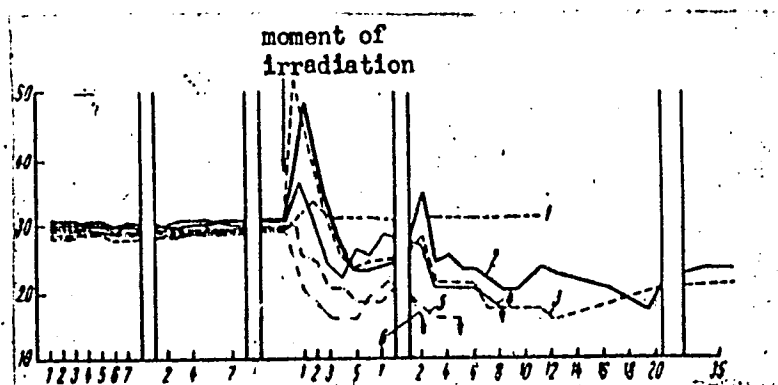


Fig. 6. Dependence of CRA diastolic pressure changes on radiation dose (r)

1 - 25 r; 2 - 500 r; 3 - 800 r; 4 - 1000 r;  
5 - 2000 r; 6 - 4000 r.

dropping toward normal; 3) a second, smaller increase in CRA diastolic pressure on the second day, replaced by progressive CRA hypotonia; 4) maximum hypotonia coincident with the most severe phase of radiation sickness. Normalization began with 18th to 20th day. In the rabbits which died, CRA diastolic pressure dropped

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ACC NR: AT6029630

immediately after irradiation instead of rising. Degree and rate of drop were inversely proportional to time to death. It is concluded that the immediate rise in CRA diastolic pressure is a manifestation of the protective-adaptive reaction of the organism. Total body  $\gamma$ -irradiation with 800 r (8 rabbits of which 3 had previously [1.5 months] received 25 r of x-rays) killed 88% within 1 to 41 days. All the animals which died developed severe radiation sickness. Ophthalmological changes were similar to those seen after irradiation with 500 r, but more pronounced. The phase changes noted in CRA diastolic pressure in the rabbits surviving 500 r were seen in extreme and accelerated form in the one surviving rabbit in this group, while the steady decrease in CRA diastolic pressure seen in the rabbits succumbing to 500 r were likewise exaggerated in the rabbits succumbing to 800 r. Total body  $\gamma$ -irradiation with 1000 r produced changes in the ophthalmological picture similar to those noted above. Phase changes in CRA diastolic pressure were not so clear as in the preceding experiments, but a slight rise in pressure, returning to normal and followed by severe hypotonia, was seen in these animals. Total body  $\gamma$ -irradiation with 2000 r and 4000 r, which killed all the animals within an average of 3.5 days, produced nearly identical changes in the ophthalmological picture. Retinal vascular reactions were different from those observed with smaller doses: phase changes were absent, the CRA diastolic pressure dropping steadily from the first minutes after irradiation until it became too small to measure. Such massive doses of radiation apparently immediately inhibit the CNS and forestall any protective reactions in the organism. It is concluded that ophthalmological changes are clearly dependent

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L 11159-66 APPROVED FOR RELEASE: 08/23/2000

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ACC NR: AT6029630

on the dose received and that changes in CRA diastolic pressure are especially reliable indices of the protective-adaptive reaction of the organism to mild radiation injuries (doses less than 1000 r). Orig. art. has: 12 figures and 1 table.  
[DP]

SUB CODE: 06/ SUBM DATE: 23Apr66/ ORIG REF: 006/ OTH REF: 006/ ATD PRESS: 5073

LS

Card 8/8



LEONIDOV, N.K., doktor tekhn. nauk; KOTOVA, Ye.V., inzh.

Problems in designing high-temperature preheaters of blast-furnace air. Stal' 25 no.10:873-879 O '65. (MIRA 18:11)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov.

KOTOVA, Ye.V., inzh.

Mechanization of labor consuming processes in casting houses  
of blast furnaces. Stal' 25 no.2:114-115 F '65. (MIRA 18:3)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu  
metallurgicheskikh zavodov.

*KOTOVA, Z.N.*

PETROV, V.P.; KOTOVA, Z.N.

Photoelectric laboratory technique for investigating the motion  
of suspended silt. Izv.AN SSSR.Ser.geofiz. no.8:1073-1077 Ag '57.  
(MIRA 10:8)

1.Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.  
(Silt)

KOTOVA, Z.N.; SERGIYEV, P.G., professor, direktor; POD'YAPOL'SKAYA, V.P., professor, zaveduyushchiy.

Intra-intestinal autoreinvasion in hymenolepiasis in white mice. Med. paraz.i paraz. no.2:168-171 Mr-Apr '53. (MLRA 6:6)

1. Gel'mintologicheskiiy sektor Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdavookhraneniya SSSR (for Kotova and Pod'yapol'skaya). 2. Institut malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdavookhraneniya SSSR (for Sergiyev). (Tapeworms)

KOTOVA, Z.N.

Experimental chemotherapy for hymenolepiasis with preparations  
of the acridine series. Med.paraz. i paraz.bol.24 no.3:262-265  
J1-S '55. (MLRA 8:12)

1. Iz otdela ekologii i biologii Instituta malyarii, meditsinskoy  
parasitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR  
(dir. instituta-Prof. P.G.Sergiyev, zav.otdelom-prof. V.P.  
Pod'yapol'skaya)

(QUINACRINE, derivatives,  
aminoquinacrine & quinacrine deriv.eff. on exper. hymeno-  
lepiasis)

(TAPEWORM INFECTION, experimental,  
hymenolepiasis, eff. of aminoquinacrine & deriv.)

LEYKINA, Ye.S.; GUSEYNOV, G.A.; KOTOVA, Z.N.; SHUMKOV, M.A.; DAVYDOVA, M.A.;  
MAMEDOV, N.A.; TUAYEV, S.M.

Epidemiological characteristics of ancylostomiasis in two villages  
in Lenkoran District. Med.paraz. i paraz.bol. 28 no.4:387-394 '59.  
(MIRA 12:12)

1. Iz sektora eksperimental'noy parazitologii Instituta malyarii,  
meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookh-  
raneniya SSSR (dir. - instituta - prof. P.G. Sergiyev, zav. sektorom  
- prof. V.P. Pod'yapol'skaya) i iz gel'mintologicheskogo otdela Insti-  
tuta malyarii i meditsinskoy parazitologii Ministerstva zdravookhra-  
neniya Azerbaydzhanskoy SSR (dir. instituta A.K. Kasimov, zav. otelom  
G.A. Guseynov).

(HOOKWORM INFECTION epidemiology)

LEYKINA, Ye.S.; KOTOVA, Z.N.; GUSEYNOV, G.A.; MAMEDOV, N.I.

Materials on the epidemiology and clinical aspects of ancylostomiasis in Lenkoran' District of the Azerbaidzhan S.S.R. Part 2: Experimental data on the development and survival of the larvae of Necator americanus in the soil. Med.paraz.i paraz.bol. 29 no.2:161-168 '60.

(MIRA 13:12)

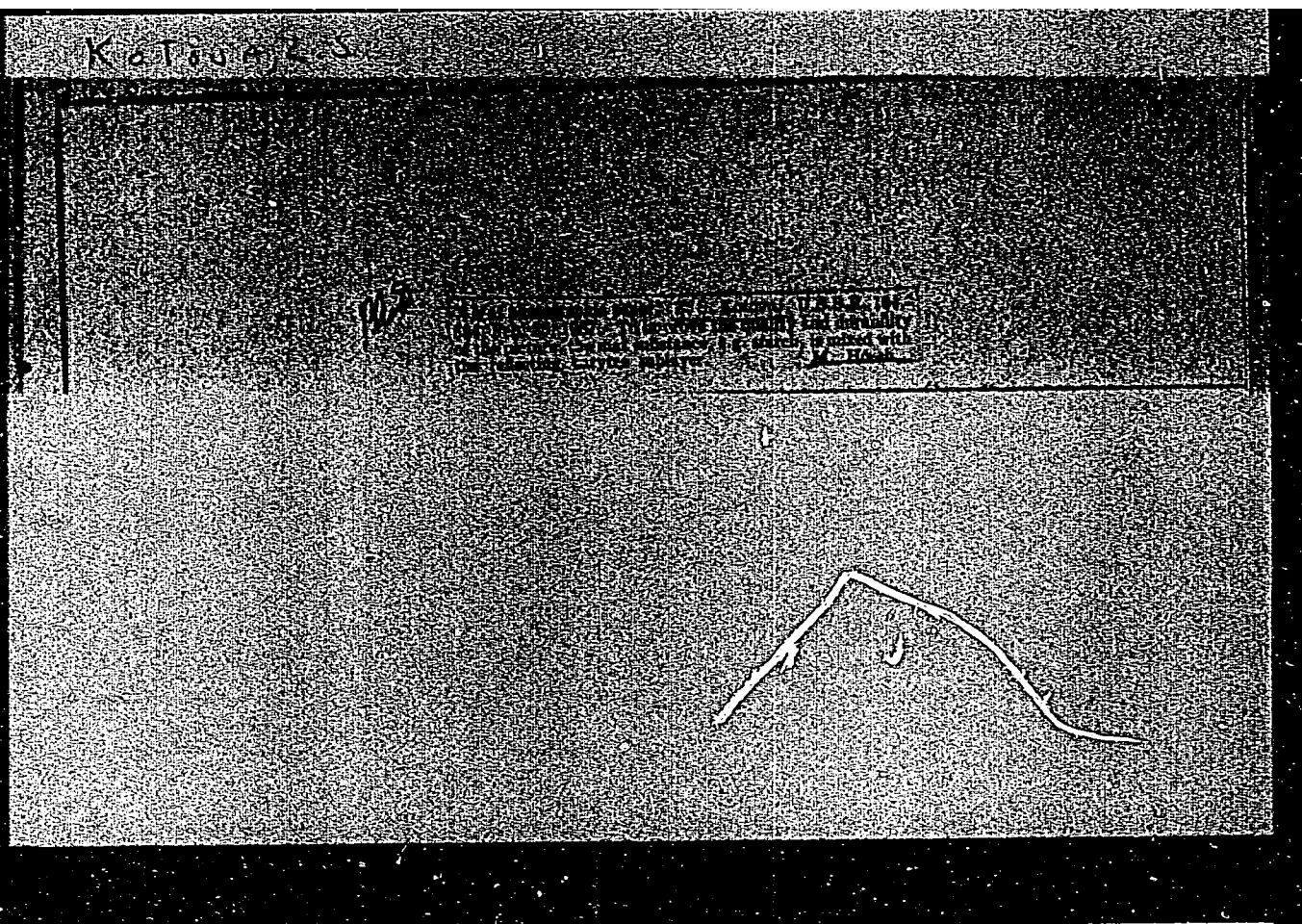
(LENKORAN' DISTRICT—HOOKWORMS)

PLOTNIKOV, M.N.; ANAN'INA, N.O.; KOZMINSKAYA, I.F.; KOTOVA, Z.N.

Helminthiases in the population of the Far North. Probl. Sev.  
no.6:141-149 '62. (MIRA 16:8)

1. Institut meditsinskoy parazitologii i tropicheskoy meditsiny  
imeni Martsianovskogo Ministerstva zdravookhraneniya SSSR.  
(RUSSIA, NORTHERN—WORMS, INTESTINAL AND PARASITIC)





KOTOVCHIKHIN, P.A.

~~Operation practices with short-wave radio communication relay lines.~~  
Vest. svyazi 15 no.7:20-21 JI '55. (MIRA 8:8)

1. Inzhener sluzhby radiosvyazi Moskovskoy direktsii radiosvyazi i radioveshchaniya. (Radio, Short-wave--Transmitters and transmission)  
(Radio relay system)

1. KOTOVETS, A., KORLIK, B.

2. USSR (600)

4. Lvov - Moving-Picture Projection

7. School for motion-picture operators at Lvov. Kinomelkhanik, No. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress. May 1953. Unclassified.

KOTOVETS, A.; KORLIK, B.

Moving-Picture Projection

Aiding schools in the organization of technical education. Kinomekhanik, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

KOTOVICH, A.

Industrial meat production. Inform.biul.VDNKH no.1:24-26 Ja '65.  
(MIRA 18:3)  
1. Zamestitel' nachal'nika Glavskotootkorna RSFSR.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000825420002-8

AUTHOR: Kotovich, A.A.

TITLE: Increasing the Accuracy of Microinterferometer Measurements of Mechanical Forces and Displacements. (Povysheniye tochnosti izmereniya mekhanicheskikh sil i peremeshcheniy na micro-interferometrach)

PERIODICAL: "Izmeritel'naya Tekhnika", No 5, Sep-Oct, 1957, pp 7-8 (USSR)

ABSTRACT: A theoretical discussion of microinterferometer measurements is given and the causes of inconstant indicator readings in measuring extremely small displacements (as for instance a flexible diaphragm under extremely small mechanical forces) by the microphasometric method (1), (2), are considered. A microinterferometer is described which was employed for experimental checking of the microphasometric method. This device features an electric magnet which provides displacements of the instrument's shaft bearing the photo-amplifier and the slot. Measurements were performed with fixed location of the slot in relation to the position of the interference strip. Inaccuracy of measurements is stated to be very large when the position of the interference band is not fixed. The described method allows measuring the flexible reed displacements in angstrom units and the corresponding forces in values

SOV/115-58-5-26/36

AUTHOR: Kotovich, A.A.

TITLE: Errors in Standard Apparatus for Measuring Field Strength in the 30-600 Mc Frequency Range (Pogreshnosti obraztsovykh ustroystv dlya izmereniya napryazhennosti polya v diapazone chastot 30-600 Mgts)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 5, pp 61-65 (USSR)

ABSTRACT: In accordance with the 1946 recommendations of the International Scientific Radio Federation, field strength measurements in the 30-600 Mc band should have tolerances of not more than  $\pm 5\%$ -10%. Two methods are used for measuring the field strength of electromagnetic waves: the standard antenna and standard field methods. Field strength measurement errors by the standard antenna method are determined by the measuring error set up by the emf in the receiving antenna and by computational error of its effective length. Using the standard field method, the field strength

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SOV/115-52-5-26/36  
Errors in Standard Apparatus for Measuring Field Strength in the  
30-600 Mc Frequency Range

the so-called "reflecting formula". The author comes to the conclusion that in the 30-600 Mc band, the only correct technique is a combination of the standard antenna and the standard field methods. Tuned half-wave dipoles raised above ground-level must be used for measurements. When measuring field strengths with a tolerance of 5%-10%, their height over the ground level should not be less than  $0.5\lambda$ . There are 1 graph, 1 vector diagram and 23 references, 14 of which are Soviet and 9 English.

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21825

9.6000 (1040)

S/115/61/000/004/004/010  
B129/B206AUTHOR: Kotovich, A. A.

TITLE: Error in measuring the coefficient of reflection of the earth

PERIODICAL: Izmeritel'naya tekhnika, no. 4, 1961, 34-37

TEXT: In order to test measuring instruments for the field strength in the range of 25-400 Mc/sec, they are placed in a test field which is produced by dipoles arranged above the surface of the earth. The author studies the errors occurring during the determination of the coefficient of reflection of the earth. This coefficient can be determined from relative measurements of the field in the perpendicular plane, analogous to the measurement of standing waves in the measuring line. A dipole transmitter is used as generator; a dipole receiver mounted on a carriage serves as a probe and the earth serves as load. The installation consists of a vertical wooden mast, on which the dipole transmitter and dipole receiver are mounted parallel to each other. The dipole transmitter is fitted at the top of the mast at a height  $h_1$  above the earth, and the dipole receiver at the height  $h_2$  between dipole transmitter and earth. The Card 1/2

Error in measuring the...

S/115/61/000/004/004/010  
B129/B206

relative error increases when the height  $h_2$  gets smaller. The error of determination of the coefficient of reflection also increases with the reduction of its value. The result shows that in the range of 25-400 Mc/sec, the coefficient of reflection of the earth can be determined from the relative measurements of the field in the vertical plane. For an increase of the measuring accuracy it is indispensable for the resistance of the \*charge of the dipole receiver to be much greater than its input resistance, and the height of the dipole was changed within the limits  $0.5\lambda < h_2 < 2\lambda$  (at  $h_1 \approx 5\lambda = \text{const}$ ). There are 1 figure, 3 tables, and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Greene F. M., Solow M. J. Res. N.B.S. 1950, 44, 5.

\*load?

Card 2/2



S/115/65/000/003/008/010  
E192/E382

AUTHOR: Kotovich, A.A.

TITLE: Errors in the measurement of the field strength  
by the test-field method at frequencies from  
25 to 400 Mc/s

PERIODICAL: Izmeritel'naya tekhnika, no. 3, 1963, 53 - 55

TEXT: The test-field method of measuring the field strength entails the use of equipment consisting of a generator-oscillator, a transmitting antenna and an antenna feeder for producing a predetermined value of the test field. It is found that the most convenient antenna for this purpose is a horizontally polarized dipole as this reduces the so-called "surface" wave to less than 1.5% of the measured field strength even if the dipole is not very high above the earth surface. The surface wave can therefore be neglected and the field, consisting only of direct and reflected waves, is represented by the formula:

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Errors in the ....

S/115/63/000/003/008/010

E192/E382

$$|E|_{0\pi} \approx \frac{60\pi I l_0}{\lambda} \left| \frac{1}{r_1} + \frac{R e^{-j2\pi(r_2-r_1)/\lambda}}{r_2} + \delta \right| \quad (1)$$

where  $l_0$  is the effective length of the dipole in metres,  $I$  is the r.m.s. value of the dipole at the maximum,  $R$  is the complex reflection coefficient of the electromagnetic waves from the earth,  $\lambda$  is the wavelength of the radiated field,  $r_1$  is the path of a direct ray from the radiating dipole to the receiving antenna,  $r_2$  is the path of the reflected ray and  $\delta$  is the surface component of the field which can be neglected. For determining the magnitude of the field it is therefore necessary to know the antenna current, the effective length of the dipole, the reflection coefficient from the earth and the corresponding distances. It is found that the antenna current at frequencies up to 150 Mc/s can be measured with an error of  $\pm 2.4\%$  and between 150 and 400 Mc/s with an error of  $\pm 4.4\%$ .

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Errors in the ....

S/115/63/000/005/008/010  
E192/E382

The effective length of the dipole can be determined with an error not exceeding 2%. The reflection coefficient can be measured with an error not exceeding 6%. Thus, the total error in determining the strength of the test field (if the distances are measured with an error not exceeding  $\pm 2\%$ ) can be determined with an error of less than 6% for frequencies below 150 Mc/s; the error is less than 7% between 150 Mc/s and 400 Mc/s. There are 3 figures and 1 table.

Card 3/3

ANTOSHIN, Nikolay Nikolayevich; SMIRNOVA, Iya Aleksandrovna;  
KOTOVICH, A.A., kand. tekhn. nauk, red.; POGREBNAYA, L.L.,  
red.

[Concise Swedish-Russian electric engineering dictionary]  
Kratkii shvedsko-russkii elektrotekhnicheskii slovar'. Mo-  
skva, Sovetskaia Entsiklopediia, 1965. 437 p.  
(MIRA 18:4)

KOTOVICH, A.F., inzhener.

Heat generating economizers of small capacity boilers. *Energetik* 2  
no.2:11-12 F '54. (MLRA 7:4)

(Steam boilers)

KOTOVICH, A.F.

Rare location of actinomycosis. Khirurgiia Supplement:44 '57.  
(MIRA 11:4)

1. Iz kafedry gosspital'noy khirurgii (zav. kafedroy - prof.  
I.B.Oleshkevich) Vitebskogo meditsinskogo instituta.  
(ACTINOMYCOSIS) (STOMACH--DISEASES)

KOTKOVICH, A.P., Cand Med Sci--(diss) "On the treatment of patients with  
burns." Vitebsk, 1958. 21 pp (Minsk State Med Inst) (U, 26-58,116)

-150-

KORENYEVICH, N.N.; KOTOVICH, A.P.

Problem of intra-arterial blood transfusion. Probl. gemat. i perel.  
~~izv~~ 5 no. 11:53-55 '60. (MIRA 14:1)  
(BLOOD---TRANSFUSION)



KOTOVICH, A.F., kand.meditsinskikh nauk

Case of strangulated traumatic diaphragmatic hernia. Zdrav. Belor.  
6 no. 5:63-64 My '60. (MIRA 13:10)

1. Iz kliniki gosspital'noy khirurgii (zaveduyushchiy - professor  
I.B. Oleshkevich) Vitebskogo meditsinskogo instituta.  
(HERNIA)

KOTOVICH, A.F.

Subcutaneous rupture of the liver, stomach, and large intestine,  
Khirurgia 36 no.4:116 Ap '60. (MIRA 13:12)  
(DIGESTIVE ORGANS—RUPTURE)

VOLKOV, Ye.N., kand. tekhn. nauk; STEPCHKOV, K.A., kand. tekhn. nauk; STRASHNIENKO, Ye.S.; PYATIGORSKAYA, T.I.; PARAMONOVA, Ye.S.; KOTOVICH, A.G.; NEMTSOVA, A.S.

Production technology, testing and storage of hydrolyzates and protein enrichers from soya. Trudy VNIKOP no.11:66-76 '62. (MIRA 17:9)

KOBULASHVILI, Sh.N.; ROTENBERG, A.G.; TIKHOMIROVA, L.N.; KAMINARSKAYA, A.K.;  
KOTOVICH, A.G.

Quick-freeze GKA-2 apparatus mounted on a gravity conveyor. Khol.tekh.  
39 no.4:4-11 J1-Ag '62. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kholodil'noy promyshlennosti (for Kobulashvili, Rotenberg, Tikhomirova, Kaminarskaya).
2. Tsentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshche-sushil'noy / promyshlennosti (for Kotovich).

VOLKOV, Ye.N.; STEPCHUKOV, K.A.; KOTOVICH, A.G.

Manufacture of dehydrated mashed potatoes in jet-grinder mills.  
Kons.i ov.prom. 15 no.11;16-19 N '60. (MIRA 13:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy  
i ovoshchesushil'noy promyshlennosti.  
(Potatoes)

S/068/63/000/001/001/004  
E071/E136

AUTHORS: Semenova, O.A., Shteyn, A.L., Kotovich, A.T.,  
and Suslov, M.P.

TITLE: Experiments on the production of sulphur free benzene

PERIODICAL: Koks i khimiya, no.1, 1963, 41-43

TEXT: In conjunction with the start of production of caprolactam on the Kemerovskiy khimicheskii kombinat (Kemerovo Chemical Combine) the coking works were to develop the production of sulphur free benzene. On the basis of laboratory work, two batches of works' benzole containing 0.098-0.116% thiophene and 0.022-0.036% carbon disulphide were washed with 95% sulphuric acid (two washes), then with alkali and batch distilled. The yield on the initial benzole fraction was: sulphur free benzene 75.6%, nitration benzene 14.5%. Wash losses - 9%, distillation losses - 0.9%. Consumption of acid 287 kg/ton and of alkali 12.4/t of the benzole fraction. Laboratory tests on the purification of benzole from thiophene by its copolymerization with unsaturated compounds present in heavy benzole indicated that only low sulphur benzene can be obtained by this method. The removal of thiophene by

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Experiments on the production of ...

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washing with sulphuric acid with addition of cyclohexene (by-product in the production of caprolactam) was tried on a laboratory scale with satisfactory results. Using 20% of sulphuric acid and 1.85% of cyclohexene, practically complete removal of thiophene was obtained after 10 minutes of stirring. It is considered that rectification is the most rational method of removal of carbon disulphide. There are 4 tables.

ASSOCIATION: Kemerovskiy koksokhimicheskiy zavod  
(Kemerovo Coking Works)

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KAZINITSKIY, Mikhail Il'ich, inzh.; PLOTKIN, Naum Borisovich, inzh.;  
TOLCHINSKIY, Aleksandr Aleksandrovich, inzh.; CHAPLITSKIY,  
Vladimir Konstantinovich, inzh.; NASEDKIN, V.M., inzh., retsenzent;  
SIVITSKIY, K.P., inzh., retsenzent; KOTOVICH, B.M., dotsent,  
retsenzent; VOLCHANSKIY, R.A., kand.tekhn.nauk, nauchnyy red.;  
DENISOV, A.A., dotsent, nauchnyy red.; BILINSKIY, M.Ya., red.;  
RAKOV, S.I., tekhn.red.

[Handbook for collective farm construction foremen] Spravochnik  
kolkhoznogo desiatnika-stroitelia. Moskva, Vses.uchebno-pedagog.  
izd-vo Trudreservizdat, 1959. 564 p. (MIRA 13:5)  
(Building)



ZEN'KOV, I.S., prof.; PETROV, N.M.; KOTOVICH, B.M., dots.;  
GAL'PERIN, M.I., doktor tekhn. nauk; ZEN'KOV, I.S.,  
prof., red.; TITOVA, B.V., red.

[Main trends in the mechanization and automation of  
the construction industry; introductory lecture for  
students in the construction and mechanics courses  
of the All-Union Engineering and Construction Cor-  
respondence Institute] Osnovnye napravleniia v mekha-  
nizatsii i avtomatizatsii stroitel'stva; vvodnaia  
leksiia dlia studentov stroitel'nykh i mekhanicheskikh  
spetsial'nostei VZISI, 1961. 23 p. (MIRA 17:9)

1. Moscow. Vsesoyuznyy zaokhnyy inzhenerno-stroitel'nyy  
institut.

23561

S/118/61/000/005/002/006  
D203/D306

9.4/60

16,8000 (1031, 1121, 1132)

AUTHORS: Kotovich, D.B., Luk'yanov, N.G. and Eygenbrot, V.M.,  
Engineers

TITLE: Control of technological parameters using electronic  
ray indicators

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, <sup>15</sup>no. 5,  
1961, 11-14

TEXT: Various methods of electronic ray indicators were studied by the  
Proyektirokonstruktorskoye byuro ministerstva stroitel'stva (Planning  
and Design Office of the Ministry of Construction), RSFSR, for the  
control of technological parameters. A basic block diagram of a multi-  
channel apparatus with the cathode ray tube is shown. The synchronizing  
of the commutator and the horizontal deflection causes the switching on  
of each of the controlled parameters only at a determined position of  
the ray along the x-x axis. Most technological processes with small  
changes of the parameters under production conditions should permit the

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Control of technological...

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use of zero-less scales. This allows an increase in the number of parameters which could be read on one CRT. The errors in reading could be reduced without an increase in the requirements with respect to the accuracy of the instrument. It was found that the number of parameters which could be read on one screen of 178 mm. diameter could be increased to 64 without inconvenience in the reading, provided that the variations of the parameters do not exceed 30% of the nominal value. The requirements with respect to the commutator are as follows: The time of the whole cycle should be less than 0.02 sec; the transmitted cycle should be stable; the commutator circuit should assure (together with the elements connected in series) a high input resistance approaching that at the no-load periods of the transmitter. Mechanical and hydro-mechanical commutators have many disadvantages e.g. the brushes, the presence of mercury and the fact that they cannot be applied in the case of a large number of channels. The working of mechanical commutators could be improved by the use of a long luminescence screen CRT which allows a 2-3 times lower velocity of the cycle. A contactless experimental photo-electric commutator is shown diagrammatically.

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Control of technological...

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Each photocell represents a variable resistance of the divider which has as second part the load resistance  $R_A$ . Because of the large value of the ratio  $\frac{R_\phi^T}{R_\phi^O}$  at a convenient selection of  $R_A$  (such that

$$\frac{R_\phi^T}{R_\phi^O}$$

$R_\phi^O \ll R_A \ll R_\phi^T$ ) it is possible to assume that when all

photocells darken, the potential across the  $R_A$  shall be near to zero, but at the lighting of one of them, the potential across the  $R_A$  will be equal to (eq. 1)

$$V_A = E_i \frac{R_A}{R_A + R_\phi^O}$$

where  $R_\phi^O$  = resistance of the illuminated photocell.  $R_\phi^T$  = resistance of the darkened photocell.  $E_i$  = signal voltage of the contacting unit.

This photo-electric commutator appears to be promising. Its disadvantage is the limited work time of the illuminator. This could be corrected by lowering the input voltage applied to the illuminator. Experiments show that lowering the glow voltage by 15% does not affect practically

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